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Works in Progress: New Technologies and the European Court of Human Rights

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ABSTRACT

A field—new technologies and human rights or, more broadly, law and technology—is in the process of being framed. Should the European Court of Human Rights be seen as part of that process? To find out, we searched the Court’s case-law using HUDOC, a database on the Council of Europe website which contains both judgments and admissibility decisions. We entered 155 keywords, all in English, and in this article we report and analyse what we found. The overall conclusion is twofold: first, it is too early to attempt a complete characterisation of the Court’s position on new technologies; and second, the Court is however ‘one to watch’.

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1. Introduction

In April 2007 the Grand Chamber of the European Court of Human Rights ('the Court') advised Natallie Evans that the rules governing assisted reproduction in the United Kingdom (UK) were compliant with the European Convention on Human Rights ('the Convention' or ECHR).¹ For Evans this meant that all hope of having a child who would be genetically related to her was extinguished; for Evans' ex-fiancé, who had triggered the case by refusing consent to the use or continued storage of the embryos, it was a guarantee that he was not going to be made a father against his wishes; and for the UK government it was a sign that its pioneering legislation, the Human Fertilisation and Embryology Act 1990,² was human-rights worthy.

Eighteen months later, the government fared less well in Strasbourg. This time, in a case concerning the indefinite retention, without consent, of the fingerprints and DNA samples and profiles of individuals who had been acquitted or whose cases had been discontinued, the Court held for the applicants, S and Marper, and against the UK government.³ Five years earlier, in a case concerning disclosure of CCTV footage to the media, the Court had advised that 'private life', protected by Article 8 ECHR, was 'a broad term not susceptible to exhaustive definition'.⁴ Another aspect of Article 8—'correspondence'—came up in *Copland v United Kingdom*,⁵ where the Court held that the collection and storage of personal information relating to the applicant's email and internet usage raised issues concerning the right to respect for correspondence and private

¹ The European Convention for the Protection of Human Rights and Fundamental Freedoms 1950, ETS 5.

² Human Fertilisation and Embryology Act 1990 (UK) (as amended), available at: http://www.opsi.gov.uk/cts/acts1990/ukpga_19900037_en_1 [last accessed 23 August 2010].

³ *S & Marper v United Kingdom* 48 EHRR 50 at para. 112.

⁴ *Peck v United Kingdom* 2003-I; 36 EHRR 41 at para. 57.

⁵ 45 EHRR 37. Monitoring of telephone usage was also in issue.

life. Complaints concerning the secret surveillance regime applicable in the UK, have also come before the Court in recent years,⁶ continuing a trend that dates back to 1984 and the case of *Malone v United Kingdom*.⁷

That gives us a tally of six cases with a link to new technologies in less than seven years. Is that in some way significant? A cluster of cases can signal a trend, and it can also have a profound impact. Think for example of *Soobramoney*,⁸ *Grootboom*⁹ and *Treatment Action Campaign*,¹⁰ a trio of decisions by the South African Constitutional Court which ignited new thinking on the justiciability of economic, social and cultural rights. Equally, however, it would be foolish to think of case law as a context where quantity is always a signpost of something significant. Still, the Strasbourg cluster—*Evans v United Kingdom*,¹¹ *S & Marper*,¹² *Peck*,¹³ *Copland*,¹⁴ *Liberty and Others*¹⁵ and *Kennedy*¹⁶—was enough for us to want to take a closer look at the jurisprudence of the European Court of Human Rights. We had a hypothesis we wanted to test: a field – new technologies and human rights (or, more broadly, law and technology) – is in the process of being framed. The Court perhaps is part of that. And, if it is, then the Court’s case law ought to take its place alongside other ideas on how to tease out the human rights challenges of new technologies and how to confront them.

⁶ See respectively *Kennedy v United Kingdom* Application No. 26839/05, 18 May 2010; *Liberty and Others v United Kingdom* Application No. 58243/00, 1 July 2008.

⁷ A 82 (1984); 7 EHRR 14.

⁸ *Soobramoney v Minister of Health, Kwazulu-Natal* 1998 (1) SALR 765 (CC).

⁹ *Government of the Republic of South Africa v Grootboom*, 2001 (1) SALR 46 (CC).

¹⁰ *Minister of Health v Treatment Action Campaign* 2002 (5) SALR 721 (CC).

¹¹ 2007-IV; 46 EHRR 34.

¹² *Supra* n. 3.

¹³ *Supra* n. 4.

¹⁴ *Supra* n. 5.

¹⁵ *Supra* n. 6.

¹⁶ *Supra* n. 6.

2. What We Did

Would this hypothesis stand up to scrutiny? A field clearly is being framed, so the question is: should the European Court of Human Rights be seen as part of that? To find out, we searched the Court's case law using HUDOC—a database, on the Council of Europe website,¹⁷ which contains both judgments and admissibility decisions. We entered 155 keywords entered, all in English,¹⁸ drawn from the glossary, index and contents pages of recent English-language publications associated with Science and Technology Studies (STS),¹⁹ and the equivalent pages in recent English-language publications on new technologies and human rights.²⁰

Throughout the search we maintained a light touch on the question of what counts as a 'new technology'. The word 'new' in 'new technology' has a cluster of competitors—from innovative to emerging, modern, high, novel and, even, revolutionary—and we did not want the search to founder on the pros and cons of different options or indeed on what was, and was not, a synonym of 'new'. More importantly, a definition might have distorted the 'human rights angle'. We did not expect that the Court's case law would (or could) cover all aspects of the relationship

¹⁷ Available at: <http://www.echr.coe.int/ECHR/EN/Header/Case-Law/Hudoc/Hudoc+database/> [last accessed 23 August 2010]. The cut-off date for the search was 1 June 2010.

¹⁸ Judgments are in English and French or, where the cases are less important, English *or* French. Our keywords were in English which meant that cases from the latter group reported in French fell outside the search. We made one exception to this rule: *Tătar v Romania*, *infra* n. 81, where the judgment, following from an admissibility decision in English, is available only in French.

¹⁹ Restivo, *Science, Technology, and Society: An Encyclopedia* (New York: Oxford University Press, 2005); Smith and Tolfree, *Roadmapping Emergent Technologies* (Leicester: Troubador Publishing, 2009).

²⁰ Brownsword, *Rights, Regulation, and the Technological Revolution* (Oxford: Oxford University Press, 2008); Brownsword and Yeung (eds), *Regulating Technologies: Legal Futures, Regulatory Frames and Technological Fixes* (Oxford: Hart Publishing, 2008); Francioni (ed), *Biotechnologies and International Human Rights* (Oxford: Hart Publishing, 2007); Murphy (ed), *New Technologies and Human Rights*, Collected Courses of the Academy of European Law, vol XVII/2 (Oxford: Oxford University Press, 2009).

between human rights and new technologies. Nonetheless, it did not seem right to prioritise a definition of new technologies if in so doing we might obscure some aspect of the rights-technologies' relationship. We were, for instance, conscious that human rights have the capacity to alter, delay or stop-dead a technology whilst it is still in research and development (R&D).²¹ At the blue skies stage, too, human rights can have an effect: think, for example, of the difference made by respect for freedom for scientific research—indeed, the International Covenant on Economic, Social and Cultural Rights describes that freedom as 'indispensable' for scientific research.²² Human rights also have the capacity to 'reinvent' innovation. By this we mean that rights can shape perspectives on the needs, benefits and priorities that drive innovation in the first place. Rights can also shape *who* innovates: there is evidence that they are part of claims-making by individuals and families who are 'genetically at risk' and want to be part of R&D—to be part, in other words, of new kinds of research endeavours, where they contribute actively to knowledge about their genetic illnesses, rather than being merely the recipients, non-recipients or, indeed, the opponents of science and technology.²³

If we turn to extant 'new technologies', further problems come to light. In particular, new applications of extant technologies—whether unexpected or striven-for, and whether market, user or mixed-innovation—can be the cause of new human-rights controversy, new acceptability or both. Side-effects, misconduct and accidents tend to

²¹ For a set of proposals on how to regulate emerging technologies, see Mandel, 'Regulating Emerging Technologies' (2009) 1 *Law, Innovation and Technology* 75.

²² Article 15(3), International Covenant on Economic, Social and Cultural Rights 1966, 993 UNTS 3 (ICESCR).

²³ See the examples cited in Rose and Novas, 'Biological Citizenship', in A Ong and SJ Collier (eds), *Global Assemblages* (Oxford: Blackwell Publishing, 2005) 439.

have profound effects too.²⁴ Even the potential for new applications, however remote, however implausible—what we might call ‘fiction science’—can have profound effects. Consider for example how Dolly the sheep, the first successful attempt at cloning a mammal by means of nuclear transfer technology, provoked an outpouring of imagined applications and how these in turn must surely have played a part in the burst of law-making around human cloning that followed soon after.

Put succinctly, we did not look for—and did not use—a definition of ‘new technologies’. We did however have 155 keywords which, in turn, provided a set of search parameters stretching across five broad categories. Those categories were as follows: (i) direct references to technology or its substrate (e.g., ‘hard drive’; ‘data’);²⁵ (ii) affixes (e.g., ‘bio’);²⁶ (iii) techno-vocabulary (e.g., ‘false-positives’);²⁷ (iv) the titles of relevant Council of Europe treaties (e.g., the European Convention on Human Rights and Biomedicine 1997), as well as titles and keywords from a range of other instruments;²⁸ and (v) principles which the Strasbourg Court might reasonably be

²⁴ See, e.g., Petryna, *Life Exposed: Biological Citizens after Chernobyl* (Princeton NJ: Princeton University Press, 2002).

²⁵ Also Antenna; Artificial limb; Atomic; Biotechnology; Biobank; CCTV; Clone; Cytogenetics; Digital; Database + personal; Electronic archive; Electronic mail; Electronic tag; Enzyme; Genetic (modified/test); Genomic; GPS; Hard disk; Human Tissue; Implant; Forensic + fibre/DNA; Internet; Laboratory; Laser; Medical equipment; Microchip; Machine + privacy; Mast; Monitor; Nanotechnology; Nuclear; Neuronal; Pace-maker; Plasmid; Radar; Scanner; Surveillance (systems); Tazer; Transplant; and Ultrasound.

²⁶ Also Micro-; Macro-; Cyber; Auto; Techno; and E- (as, e.g., in e-commerce).

²⁷ Also Artificial Intelligence; Automated; Biometric; Bioterrorism; Biological + Terrorism; Calibrate; Computerised; Cloning; Distance Learning; Energy + Alternative/Clean/Green/Thermal/Wind; Experiment/ation; Hybrid; Intubation; Inventor; Graft; Optical; Environmentally Friendly; Electronic; Magnetic-resonance imaging (MRI); Mechanised; Patent(ee); Technology; Technologies; Technological; Recombinant; Reconnaissance; Respirator; Scientific Progress; Scientific Uncertainty; Surgical; Solar; Sustainable; Ventilator; and Xenotransplantation.

²⁸ Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine: Convention on Human Rights and Biomedicine 1997, ETS 164 (Oviedo Convention). Four Additional Protocols have been adopted: on the prohibition of cloning human beings 1998, ETS 168; on transplantation 2002, ETS 186; on biomedical research 2004, ETS 195; and on genetic testing for health purposes 2008, ETS 203. The other Council of Europe instruments used as keywords were: Convention for the Protection of Individuals with regard to Automatic Processing of

expected to invoke in cases concerning new technologies (e.g., the principle of respect for human dignity).²⁹

This article reports on what we found in the Court's case law using the above search method. It reports, too, on what we didn't find. The structure is as follows: Section 3 explains why we embarked on the study, and Sections 4 and 5 report the findings—Section 4 deals with what we *did not find*, and Section 5 describes and discusses what *is* in the case law.

3. A Fool's Errand?

Already, some readers will have determined that a hypothesis about new technologies and the European Court of Human Rights is one thing but pursuing it is a different, less defensible matter. That is fair enough: there are a number of reasons why the study we conducted may seem premature, even peculiar. For starters, although a range of new technologies have been taken up by human rights activists, the field we are calling 'new technologies and human rights' is not widely recognised.³⁰ And, where it is recognised, human rights often seems to share the ground (and potentially compete) with bioethics.

Personal Data 1981, ETS 108 (Data Protection Convention), and its Additional Protocol regarding Supervisory Authorities and Transborder Flow 2001, ETS 181; Convention on Cybercrime 2001, ETS 185, and its Additional Protocol 2003, ETS 189; European Agreement on the Exchange of Therapeutic Substances of Human Origin 1958, ETS 26, and its Additional Protocol 1984, ETS 109; European Convention for the Protection of the Audiovisual Heritage 2001, ETS 183; European Agreement on the Protection of Television Broadcasts 1960, ETS 34 and Protocols 1965, ETS 54 and 1983, ETS 113; European Convention on Transfrontier Television 1989, ETS 132. The other (non Council of Europe) instruments are listed *infra* nn. 33, 51, 52, 53, 54, 58 and 102.

²⁹ Also the precautionary principle; informed consent; non-discrimination; freedom of scientific research; public participation; protection of the moral and material interests resulting from one's scientific productions; benefit sharing; the common heritage of humankind; the self-determination of peoples; best interests; respect for human life; integrity of the person; freedom of expression; privacy; confidentiality; access to information; access to justice; and data protection.

³⁰ But, as examples of early interventions, see Weeramantry, *Justice Without Frontiers: Protecting Human Rights in the Age of Technology: Vols I and II* (The Hague: Kluwer, 1997-98); UNHCHR, Expert Group on Human Rights and Biotechnology, 'Conclusions', Geneva, 24-25 January 2002.

There have also been difficult relationships between human rights and both intellectual property and trade law, as well as differences of opinion between activists and scholars aligned with the access to knowledge (A2K) movement and their counterparts in the human rights one (especially on the question of the state's role).³¹

A second problem is Europe: specifically, if what interests us is 'who' or 'what' within Europe is influencing the emerging field of law, rights and technology, it is not obvious that the Strasbourg Court has the best claim. So, for example, the Oviedo Convention and its Protocols, and the Data Protection Convention,³² facilitate claims-making by the Court's parent organisation, the Council of Europe. Another contender would be the European Patent Office (EPO), which administers the European Patent Convention—an instrument which provides that patents will not be granted for inventions the exploitation of which would be contrary to *ordre public* or morality.³³

Perhaps, however, the strongest case is that of the European Union (EU). Consider the evidence: the EU has signed up to public engagement with science;³⁴ endorsed a precautionary approach³⁵ (and for so doing it has been brought before a Panel of the WTO);³⁶ appointed a European Group on Ethics in Science and New Technologies

³¹ For discussion of these tensions, see respectively Wüger and Cottier (eds), *Genetic Engineering and the World Trade System*, World Trade Forum (Cambridge: Cambridge University Press, 2008); Beutz Land, 'Protecting Rights Online' (2009) 34 *Yale Journal of International Law* 1.

³² Supra n. 28. Article 29 of the Oviedo Convention offers the possibility to request advisory opinions from the ECtHR concerning the Convention's interpretation

³³ Article 53(a), European Patent Convention 1973, 1065 UNTS 199.

³⁴ See, e.g., its 'Science and Society Action Portfolio', available at: <http://ec.europa.eu/research/science-society> [last accessed 23 August 2010].

³⁵ See in particular European Commission, 'Communication from the Commission on the Precautionary Principle', COM (2000) 1 final (2 February 2000) at para. 3.

³⁶ *EC-Measures Affecting the Approval and Marketing of Biotech Products*, Panel Reports WT/DS291/R, WT/DS292/R, WTDS293/R, 29 September 2006.

(EGE);³⁷ promoted the development of international standards for data protection;³⁸ and issued a growing pile of directives and regulations.³⁹ More generally, the fact that the European Community, as it then was, participated in the negotiation and signing of a ‘core’ international human rights treaty, the Convention on the Rights of Persons with Disabilities,⁴⁰ would seem to indicate that the EU both sees itself and wants to be seen as an actor in the international human rights field.⁴¹ The EU Charter of Fundamental Rights, now part of the primary law of the EU, corroborates this point; it also corroborates the original claim—namely, that the EU has a good case to be seen as the foremost European actor in the field of ‘new technologies and human rights’—in that it establishes data protection as an *autonomous* fundamental right, a move that makes it stand out amongst human rights instruments (including the ECHR) ‘which, for the most part, treat the protection of personal data as an extension of the right to privacy’.⁴²

To complete the sceptics’ list, the Strasbourg Court has to be brought into the discussion. The sceptics’ position—maintained in the face of a growing body of scholarship on the Court⁴³—is that this Court is not suitable as study site. Typically, the

³⁷ Details available at: http://ec.europa.eu/european_group_ethics/index_en.htm [last accessed 23 August 2010].

³⁸ This is a goal of ‘The Stockholm Programme: An Open and Secure Europe Serving and Protecting the Citizen’ (Brussels: European Commission, 2009).

³⁹ See, e.g., Directive 98/44/EC on the Legal Protection of Biotechnological Innovations, [1998] OJ L/213/13.

⁴⁰ Convention on the Rights of Persons with Disabilities 2006, 189 UNTS 137 (CRPD). For an analysis of the role played by the EU, see de Búrca, ‘The EU in the Negotiation of the UN Disability Convention’ (2010) 35 *European Law Review* 174.

⁴¹ Note too that the Treaty on the Functioning of the European Union (the Lisbon Treaty) provides for the accession of the EU to the ECHR.

⁴² European Union Agency for Fundamental Rights (FRA), ‘Data Protection in the European Union: The Role of National Data Protection Authorities’ (2010) at 6.

⁴³ See, e.g., Harris et al., *Harris, O’Boyle and Warbrick: Law of the European Convention on Human Rights*, 2nd edn (Oxford: Oxford University Press, 2009). Specialist texts include: Dembour, *Who Believes in Human Rights? Reflections on the European Convention* (Cambridge: Cambridge University Press, 2006); Greer, *The European Convention on Human Rights: Achievements, Problems and Prospects* (Cambridge: Cambridge University Press, 2006); Mowbray, *The Development of Positive Obligations*

criticisms go as follows: why spend time studying a court whose decisions do not appear to build towards a system of judicially-constructed rules? Also, doesn't the margin of appreciation, and the Court's practice of balancing conflicting rights against each other or against competing public interests,⁴⁴ get in the way of the ECHR being an 'instrument of European public order for the protection of individual human beings'?⁴⁵ Finally, in light of the fact that our subject-matter is 'new technologies and human rights', the sceptics may also say that the Convention is not the obvious starting-point in that it contains mostly civil and political rights,⁴⁶ makes no mention of human dignity, and offers no explicit protection to personal data.

The sceptics' arguments are formidable: what, then, convinced us to go ahead with the study? For starters, the cluster of cases involving the UK—*Evans, S & Marper, Peck, Copland, Liberty and Others* and *Kennedy*—was a considerable draw, not least because the UK has incorporated the Convention into domestic law and its judges have been directed to take Strasbourg jurisprudence into account in determining questions concerning Convention rights.⁴⁷ There was more to it, however, than parochialism. The UK is not the only Council of Europe state that sees itself as being in a race to technoinnovate. Moreover, the EU sees itself in this way too: in the 2000 Lisbon Agenda it

under the European Convention on Human Rights by the European Court of Human Rights (Oxford: Hart Publishing, 2004).

⁴⁴ On this practice, see Mowbray, 'A Study of the Principle of Fair Balance in the Jurisprudence of the European Court of Human Rights' (2010) 10 *Human Rights Law Review* 289.

⁴⁵ *Loizidou v Turkey* A 310 (1995); 20 EHRR 99 at para. 93. See further Greer, *supra* n. 43; Krisch, 'The Open Architecture of European Human Rights Law' (2008) 71 *Modern Law Review* 183; Letsas, 'Two Concepts of the Margin of Appreciation' (2006) 26 *Oxford Journal of Legal Studies* 705.

⁴⁶ In a number of cases, including *Airey v Ireland* A 32 (1979); 2 EHRR 305 at para. 26, the Court has emphasised that 'there is no water-tight division' separating socio-economic rights from the rights covered in the Convention. See however *N v United Kingdom* 47 EHRR 39 at para. 44: 'Although many of the rights it contains have implications of a social or economic nature, the Convention is essentially directed at the protection of civil and political rights.'

⁴⁷ Human Rights Act 1998, s 2(1).

vowed to use scientific research to build the most competitive global knowledge-economy by 2010.⁴⁸ Individual Europeans are also heavily invested in the promise of new technologies. Take, for example, assisted reproductive technologies (ARTs), the quintessential ‘hope technologies’,⁴⁹ where it is clear that saying ‘no’ remains awfully hard even though failure rates are high and the cost—psychologically, physically and financially—is prohibitive.

Separating hope from hype is far from easy however, and fear is usually close at hand as well. For example, if states embrace technologies as regulatory tools in the field of criminal justice on the grounds that they offer efficient and effective routes to manage crime and criminals, do we risk corroding dignity, human rights and fundamental freedoms? Do we—to use Roger Brownsword’s phrase—risk displacing the Rule of Law by the Rule of Technology?⁵⁰ For others, the loss of human dignity is what is most feared, and there are others again for whom loss of ‘competitiveness’ is the primary worry.

This mix of hope, hype and fear may go some way towards explaining why there has been a flurry of international human rights law- and policy-making on new technologies. The United Nations Educational, Scientific and Cultural Organization (UNESCO) has championed much of this law-making,⁵¹ generating a triumvirate of soft law instruments: the Universal Declaration on the Human Genome and Human Rights

⁴⁸ See Lisbon European Council Presidency Conclusions (2000), available at: http://www.europarl.europa.eu/summits/lis1_en.htm#a [last accessed 23 August 2010].

⁴⁹ Franklin, *Embodied Progress: A Cultural Account of Assisted Conception* (London: Routledge, 1997).

⁵⁰ Brownsword, *supra* n. 13 at 2. On the use of technology by state and non-state actors, see Bekou and Bergsmo, Mechlem, Pelsinger, and Whitty, this issue of the *Human Rights Law Review*.

⁵¹ International instruments on environmental matters—in particular, the Cartagena Protocol to the Convention on Biological Diversity 2000, 2226 UNTS 208, and the UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters 1998, 2161 UNTS 447 (Aarhus Convention)—are also of potential interest.

1997, the International Declaration on Human Genetic Data 2003 and the Universal Declaration on Bioethics and Human Rights 2005.⁵² Of potential relevance, too, are its instruments on cultural property and on the rights of indigenous persons.⁵³ There has also been a UN Declaration on Human Cloning,⁵⁴ and there is a UN Special Rapporteur on Human Rights and the Human Genome.⁵⁵ More recently, the Human Rights Council has called on the Office of the UN High Commissioner on Human Rights (OHCHR) to report on best practice in the use of forensic genetics for identifying victims of serious violations of human rights and international humanitarian law.⁵⁶ There has also been acknowledgement of both the ‘increasing relevance’ and ‘continued neglect’⁵⁷ of the right to enjoy the benefit of scientific progress and its applications.⁵⁸

The question that arises is: has this flurry of law- and policy-making eased or, indeed, melted away the friction—the mix of hope, hype and fear—referred to earlier? In short, no, it has not. Numerous tough questions lie ahead, such as ‘[d]oes intellectual

⁵² Available at:

http://portal.unesco.org/en/ev.php-URL_ID=12025&URL_DO=DO_TOPIC&URL_SECTION=-471.html [last accessed 23 August 2010]. See, in addition, the Universal Declaration on the Responsibilities of the Present Generations Towards Future Generations (1997).

⁵³ See UNESCO Universal Declaration on Cultural Diversity 2001 and related instruments, notably the Convention for the Safeguarding of the Intangible Cultural Heritage 2003 and the Convention on the Protection and Promotion of the Diversity of Cultural Expressions 2005, available at the UNESCO portal, *ibid.* See also the UN Declaration on the Rights of Indigenous Peoples 2007, adopted by GA Res. 61/295, 13 September 2007, A/RES/61/295.

⁵⁴ GA Res. 59/280, 23 March 2005, A/RES/59/280 at para. (b), wherein ‘Member States are called upon to prohibit all forms of human cloning inasmuch as they are incompatible with human dignity and the protection of human life ...’.

⁵⁵ See ‘Human Rights and the Human Genome’, preliminary report submitted by Special Rapporteur Iulia-Antonella Motoc, E/CN.4/Sub.2/2003/36 (10 July 2003); E/CN.4/Sub.2/2004/38 (23 July 2004); E/CN.4/Sub.2/2005/38 (14 July 2005). See also Motoc, ‘The International Law of Genetic Discrimination’: The Power of “Never Again” in Murphy, *supra* n. 20 at 222.

⁵⁶ Human Rights Council Res 10/26, 9 November 2009, A/HRC/10/9.

⁵⁷ See para. 1, Venice Statement on the Right to Enjoy the Benefits of Scientific Progress and its Applications 2009, available at: http://shr.aaas.org/article15/Reference_Materials/VeniceStatement_July2009.pdf [last accessed 23 August 2010]. See further Müller, this issue of the *Human Rights Law Review*.

⁵⁸ See, e.g., Article 15(1)(b), ICESCR.

property deserve to be treated as a fundamental right? And if it does, how does a human rights-inspired conception of intellectual property differ from existing rules that promote innovation and creativity?’⁵⁹ Moreover, some of the voices raised in answer to these questions will take the view that law-making (and perhaps especially law-making in the name of human rights) is to be discouraged; that law is simply “too slow” for the flexibility and responsiveness, not to mention anticipatory dynamism, “required” by modern science, technology, innovation and global competitiveness’.⁶⁰

To sum up: a cluster of cases led us to formulate a hypothesis and, for four reasons, investigating it seemed a good course of action. First, the UK, the jurisdiction in which we are based, was involved in all six of the original cases. Second, the UK is certainly keen on techno-innovation but it is not alone in that: other European states and the EU have this trait as well, and Europeans are both subject to and consumers of new technologies. Third, although other European actors may seem more obvious starting-points for a study on new technologies and human rights, the ECHR and the Strasbourg Court are clearly the focal points for human rights at the European level. Also, Convention jurisprudence is a powerful force, both in contracting states and internationally. Fourth, and finally, the relationship between human rights and new technologies is one that needs to be studied, not least because there is nothing clear-cut about either the role of human rights in regulating such technologies or the impact on human rights of a take-up of technologies (including by human rights advocates themselves).

⁵⁹ Helfer, ‘The New Innovation Frontier: Intellectual Property and the European Court of Human Rights’ (2008) 49 *Harvard International Law Journal* 1 at 6.

⁶⁰ *Taking European Knowledge Society Seriously: Report of the Expert Group on Science and Governance* (Luxembourg: European Commission, 2007) at 52.

4. What We Didn't Find

We did experience doubt at various points—mostly when it seemed that we might have more to say about what we had not found in the Court's case law than what we had. Yet what is not in the Court's case law—or isn't there in the volume one might have hoped for—is not without interest. With that in mind, we use this section of the article to look at what is not in the case law, beginning with the Council of Europe Convention on Human Rights and Biomedicine, also known as the Oviedo Convention.

The **Oviedo Convention** is a treaty of the Council of Europe that sets out the fundamental principles applicable in day-to-day medicine as well as those applicable to new technologies in human biology and medicine. We had hoped that by using the Convention's title as a keyword we would have a series of high-quality hits, not least because of the Court's practice of referring to other international treaties, and even soft law, when interpreting the ECHR.⁶¹ Those hopes were not realised: to date, the Oviedo Convention has only been referred to as a relevant international legal source in the limited context of informed consent to medical interventions,⁶² and there is also only one mention of any of its Additional Protocols.⁶³ The only other Council of Europe instruments from our keyword list that appeared in technology-centred cases were the **Data Protection Convention** and those relating to television broadcasting.⁶⁴ Ranging

⁶¹ See, e.g., *Soering v United Kingdom* A 161 (1989); 11 EHRR 439.

⁶² See *Juhnke v Turkey* 49 EHRR 24 at para. 56; *Glass v United Kingdom* 2004-II; 39 EHRR 341 at para. 58; *Evans v United Kingdom*, supra n. 11 at para. 50; *IG, MK and RH v Slovakia* Application No. 15966/04, 22 September 2009; *MAK and RK v United Kingdom* Application Nos. 45901/05 and 40146/06, 23 March 2010 at para. 35; *SH and Others v Austria* Application No. 57813/00, 1 April 2010 at para. 38.

⁶³ *Vo v France* 2004-VIII; 40 EHRR 12 at para. 37.

⁶⁴ See the instruments cited supra n. 28.

more widely, just one of the **UNESCO triumvirate** has been referred to by the Court,⁶⁵ and we found no references at all to the **UN Declaration on Human Cloning**, or to the principles of **benefit-sharing**, the **common heritage of mankind** (bar a brief mention in a dissenting opinion)⁶⁶ or the **self-determination of peoples**.⁶⁷ Meanwhile, **access to information** drew mixed results: nothing under Article 10,⁶⁸ but acknowledgement of the importance of securing such access in the environmental realm and, crucially, the crafting of a positive obligation to support this.⁶⁹

On the interaction between bioethics, medical ethics and law we found too little to allow for a characterisation of the Court's view. The **Universal Declaration on Bioethics and Human Rights** (UDBHR), which was adopted in 2005, has been referred to in just two cases, *IG, MK and RH v Slovakia*⁷⁰ and *Evans v United Kingdom*.⁷¹ In each, the focus was on consent and it was Article 6 of the UDBHR, which deals with this issue, to which the Court made reference. The Court has used the term 'bioethics' on just three other occasions: in each instance the reference was to the work of the Council of Europe Steering Committee on Bioethics and its predecessor, the *ad hoc* committee of experts on

⁶⁵ The UDBHR 2005: see main text *infra* nn. 70-71.

⁶⁶ *Balmer-Schafroth and Others v Switzerland* 1997-IV; 25 EHRR 598 (dissenting opinion of Judge Pettiti).

⁶⁷ For discussion of negotiations towards an international legally-binding regime on access and benefit sharing, see Nijar, 'Incorporating Traditional Knowledge in an International Regime on Access to Genetic Resources and Benefit Sharing: Problems and Prospects' (2010) 21 *European Journal of International Law* 460.

⁶⁸ In *Leander v Sweden* A 116 (1987); 9 EHRR 433 at para. 74, the Court emphasised that Article 10's freedom to receive information 'basically prohibits a government from restricting a person from receiving information that others may wish or may be willing to impart to him'. If the guarantee is limited to receiving and imparting, then clearly it provides neither a right of access to information nor an obligation to provide it.

⁶⁹ See main text *infra* n. 157.

⁷⁰ *Supra* n. 62.

⁷¹ *Supra* n. 11 at para. 52.

progress in the biomedical sciences.⁷² Likewise, neither ‘ethics’ nor ‘medical ethics’ has featured in technology-centred cases examined by the Court,⁷³ and we also had no relevant hits for ‘**best interests**’, a core ethical principle.⁷⁴ This absence of ethics references was surprising, not least because the Court has been particularly clear on the requirement of **informed consent**: holding for example that, in the absence of consent, experimental medical treatment may breach Article 3, amounting to inhuman treatment and, potentially, torture.⁷⁵

Human dignity—specifically, the principle of respect for human dignity—was another keyword that produced fewer ‘new technology and human rights’ cases than expected. References to dignity recur in the UNESCO triumvirate (the UDHR 1948, IDHGD 2003 and UDBHR 2005), and in *Pretty v United Kingdom*, which concerned assisted suicide, a Grand Chamber of the Strasbourg Court affirmed that ‘the very essence of the [ECHR] is respect for human dignity and human freedom’.⁷⁶ From a ‘new technologies’ angle however there is little in the Court’s case law: just one reference, and it is in a partly dissenting opinion—an opinion by Judge Marcus-Helmons in the case of

⁷² *SH and Others v Austria*, supra n. 62 at para. 37; *Vo v France*, supra n. 63 at paras 38-40; *Wilkinson v United Kingdom* Application No. 14659/02, 28 February 2006.

⁷³ ‘Professional ethics’ has featured in case law reviewing decisions made by professional disciplinary bodies: see, e.g., *Frankowicz v Poland* Application No. 53025/99, 16 December 2008; *Stambuk v Germany* 37 EHRR 42; and *Hertel v Switzerland* 1998-VI; 28 EHRR 534.

⁷⁴ But as noted by Harris et al., supra n. 43 at 407, the term ‘best interests of the child’ has been used in Article 8 case law as a way of capturing the legitimate aim pursued by an interference with parents’ ‘family life’. See, e.g., *Neulinger and Shuruk v Switzerland* Application No. 41615/07, 8 January 2009.

⁷⁵ *X v Denmark* 32 DR 282 (1983). On the question of using a medical procedure, without a suspect’s consent, in order to obtain evidence of a crime and whether such evidence can be used at trial, see *Jalloh v Germany* 2006-IX; 44 EHRR 667. See relatedly *Saunders v United Kingdom* 1996-VI; 23 EHRR 313 at para. 69, where the Court said that Article 6 guarantee of freedom from self-incrimination does not extend to ‘the use in criminal proceedings of material which may be obtained from the accused through the use of compulsory powers but which has an existence independent of the will of the suspect such as, *inter alia*, ...breath, blood and urine samples and bodily tissue for the purpose of DNA testing’.

⁷⁶ 2002-III; 35 EHRR 1 at para. 65.

Cyprus v Turkey.⁷⁷ Noting that ‘the rapid evolution of biomedical techniques’ meant that ‘new threats to human dignity may arise’, Judge Marcus-Helmons alluded to the Oviedo Convention as an instrument that ‘seeks to cover some of those dangers’. He went on to note two problems with this Convention: first, ‘only a limited number of States have signed it’ and, second, it only affords the European Court of Human Rights consultative jurisdiction. He therefore suggested that:

[i]n order [for] this “fourth generation of human rights” to be taken into account so that human dignity is protected against possible abuse by scientific progress, the Court could issue a reminder that under Article 2 of the European Convention on Human Rights the States undertook to protect everyone’s right to life by law.⁷⁸

The **precautionary principle** was another keyword that proved disappointing. This principle emerged first in the environmental arena but lately it has migrated, including to both the public health field⁷⁹ and the biotechnology one.⁸⁰ We expected a cluster of technology-centered cases making reference it: we met with mixed results—of the six cases found, only three related in any way to technology⁸¹ while the remaining three dealt with child welfare or adoption.⁸²

⁷⁷ 2001-IV; 35 EHRR 30.

⁷⁸ Ibid. (partly dissenting opinion of Judge Marcus-Helmons).

⁷⁹ See, e.g., Stokes, ‘The EC Courts’ Contribution to Refining the Parameters of Precaution’ (2008) 11 *Journal of Risk Research* 4.

⁸⁰ On the use of the principle in relation to red biotechnologies, see, e.g., Brownsword, ‘Happy Families, Consenting Couples, and Children with Dignity: Sex Selection and Saviour Siblings’ (2005) 17 *Child and Family Quarterly* 435; Somsen, ‘Cloning Trojan Horses: Precautionary Regulation of Reproductive Technologies’, in Brownsword and Yeung, *supra* n. 20 at 221.

⁸¹ *Tătar and Tătar v Romania* Application No. 67021/01, 5 July 2007 (and the subsequent French-language judgment, *Tătar v Romania* Application No. 67021/01, 27 January 2009); *Asselbourg and Others v Luxembourg* 1999-VI (inadmissible); *Balmer-Schafroth*, *supra* n. 66 (dissenting opinion of Judge Pettiti). In *Tătar and Asselbourg*, the Court refers not to the precautionary principle but the ‘principle of precaution’. Note also *SH v Austria*, *supra* n. 62 at paras 49-54 where the Court discusses how states should respond to the risks of new medical techniques in sensitive areas such as assisted conception.

⁸² *Fretté v France* 2002-I; 38 EHRR 438 (concurring opinion of Judge Costa); *Neulinger and Shuruk*, *supra* n. 74 (dissenting opinion of Judge Steiner); *Dolhamre v Sweden* Application No. 67/04, 8 June 2009 (dissenting opinion of Judge Zupančič).

We do want to say a little about one of the adoption cases thrown up by the search, *Fretté v France*.⁸³ This decision has attracted heavy criticism and, recently, in *EB v France*⁸⁴ the Grand Chamber opted for a very different approach in a case with similar (though not identical) facts. In *Fretté*, the Court, in a 4-3 decision, held that the refusal to grant an authorisation to adopt to Philippe Fretté, a single gay man, did not violate his Convention rights. In reaching its decision, the majority accepted the argument of the French government to the effect that there was no consensus in the scientific community on the possible consequences of a child being adopted by one or more homosexual parents. That lack of consensus meant, they said, that in this area a broad margin of appreciation had to be left to states.⁸⁵

The precautionary principle gets an explicit mention in the case: Judge Costam, in a partly concurring opinion, suggests that ‘most of the majorities have based their decision, without saying so, on the precautionary principle’.⁸⁶ For many, however, the majority’s approach towards scientific uncertainty was unacceptable; it was being used, they said, to undermine the principle of non-discrimination on the grounds of sexual orientation. One commentator proposed that the Court ‘should be using the proportionality principle to temper the precautionary behavior of the government in the face of uncertain science’.⁸⁷ Interestingly, in *EB v France*, which like *Fretté* concerned a refusal to authorise adoption by a gay person, the Grand Chamber took a different

⁸³ Ibid.

⁸⁴ 47 EHRR 509.

⁸⁵ *Fretté*, supra n. 82 at para. 38.

⁸⁶ Ibid.

⁸⁷ Stone, ‘Margin of Appreciation Gone Awry’ (2003) 3 *Connecticut Public International Law Journal* 271 at 223.

approach, bypassing the issue of scientific uncertainty and finding a violation of Article 14, taken in conjunction with Article 8.

The majority's approach in *Fretté* seems anomalous following *EB v France*—albeit that the Grand Chamber described the two cases as different ‘in a number of respects’.⁸⁸ If *Fretté* is out of line, that would certainly be a welcome outcome as regards equality and non-discrimination: it would also fit with the European Convention on the Adoption of Children which acknowledges that states may wish to provide for adoption by same-sex couples.⁸⁹ None of this, however, tells us how the precautionary principle is likely to play out in cases on *new technologies*. For assistance on that point, we need to turn to the three technology-related cases that mention the principle. The question is: do these take us towards an understanding of the Court's approach to the precautionary principle?

All three cases—*Tătar and Tătar v Romania* (and the subsequent French-language judgment, *Tătar v Romania*),⁹⁰ *Asselbourg and Others v Luxembourg*⁹¹ and *Balmer-Schafroth and Others v Switzerland*⁹²—examined the risks of pollution from either mining or nuclear power technologies. As we explain a little later, the Court sees both pollution and environmental hazards more generally as matters that fall within its remit. We explain, too, that it has imposed positive ‘environmental’ obligations on states under both Article 2 (right to life) and Article 8 (right to respect for private and family life, and home). These are, moreover, obligations of considerable substance—requiring states not just have laws and regulations designed to control severe environmental

⁸⁸ Supra n. 84 at para. 71.

⁸⁹ ETS 58, adopted by the Committee of Ministers of the Council of Europe, (rev) 7 May 2008.

⁹⁰ Supra n. 81.

⁹¹ Ibid.

⁹² *Balmer-Schafroth*, supra n. 66.

hazards (including from dangerous industrial or technological activities, whether public or private), but to pursue *effective enforcement* of those laws.⁹³ States are also subject to obligations concerning participation and access (to justice and to information).⁹⁴ Together, this range of obligations conjures a Court that might be inclined towards the precautionary principle: the experience in practice, however, has not been so clear-cut—not least because in cases involving environmental issues the Court accords a wide margin of appreciation to the state.⁹⁵

In *Balmer-Schafroth* the Grand Chamber considered the danger posed to the applicants by a nearby nuclear power plant, holding that the applicants had failed to establish a direct link between the operating of the power station and their right under Article 8 to protection of their physical integrity. The majority emphasised that an alleged personal danger should be ‘serious but also specific and, above all, imminent’⁹⁶ before a violation could be considered. This stance came in for criticism in the dissenting opinion, led by Judge Pettiti and joined by seven colleagues:

The majority appear to have ignored the whole trend of international institutions and public international law towards protecting persons and heritage, as evident in European Union and Council of Europe instruments on the environment, the Rio agreements, UNESCO instruments, the development of the precautionary principle and the principle of conservation of the common heritage.⁹⁷

⁹³ See the cases cited *infra* n. 157.

⁹⁴ See in particular *Taşkın and Others v Turkey* 2004-X; 42 EHRR 1127, discussed *infra* main text at n. 162ff.

⁹⁵ See Council of Europe Steering Committee for Human Rights (CDDH), ‘Final Activity Report, Human Rights and the Environment’ (29 November 2005) CDDH (2005)016 Addendum II (rev) at 10, presenting this as one of the general principles characterising the Court’s case law in the environmental field.

⁹⁶ *Supra* n. 66 at para. 40.

⁹⁷ *Ibid.*

More recently, in *Tătar*,⁹⁸ where the extraction processes of a gold-mining company used sodium cyanide, known for its toxicity, and operations were allowed to continue in the wake of an accident after which pollution, in excess of authorised norms, was detected near the applicants' home, the Court made explicit use of the precautionary principle. It noted the 'evolution of [this] philosophical principle to a legal standard'⁹⁹ in European law and also how it had been formulated in the case law of the European Court of Justice. It also noted, *inter alia*, both the Aarhus Convention and the Rio Declaration on Environment and Development.¹⁰⁰ Turning to the facts of the case, it observed that the presence of a serious and material risk to human health and well-being imposed an obligation on the state to assess risks, at the permit stage and after the accident, and to take appropriate measures. The Court noted that a preliminary impact assessment had indicated that there were risks involved in the mining process but that the authorities had failed to lay down operating conditions that would preclude the risk of serious harm. Moreover, even after the accident took place, the authorities did not intervene to stop the process. This was, the Court said, in breach of the precautionary principle. Finding a violation of Article 8, the Court concluded that the authorities failed in their obligation to assess, to a satisfactory degree, the potential risks of the mining activities, and to take appropriate measures so as to protect the rights of those concerned to respect for their private lives and homes.¹⁰¹

⁹⁸ *Supra* n. 81.

⁹⁹ *Ibid.* at para. 69: 'l'évolution du principe d'une conception philosophique vers une norme juridique' (our translation).

¹⁰⁰ *Ibid.* at para. 120.

¹⁰¹ *Ibid.* at para. 125. Cf. *Asselbourg*, *supra* n. 81 where the Court said that it was not evident 'that the conditions of operation imposed by the Luxembourg authorities and in particular the norms dealing with the discharge of air-polluting wastes were so inadequate as to constitute a serious violation of the principle of precaution'.

To close this section of the article we want briefly to look at intellectual property rights. New technologies are often attached to legal rights such as patents, and are closely linked to trademarks and copyright: as a result, we anticipated cases dealing with the state's duty to protect an individual's interests through legislation, preventive measures or provision of a remedy. Coming up with a keyword to capture intellectual property rights was not easy, however. Initially we used **'protection of the moral and material interests resulting from one's scientific productions'** and, when this failed to give us any cases, we opted for a further search using terms that feature in General Comment 17 of the Committee on ESCR.¹⁰² Again, there were no hits—apart from 'intellectual property'.¹⁰³ The latter term did, however, reveal that the Convention institutions have been called upon to rule on questions of intellectual property only very rarely. It also revealed a couple of points of substance. First, rights such as trade marks,¹⁰⁴ copyrights,¹⁰⁵ patents,¹⁰⁶ and the use of an internet domain name¹⁰⁷ have been considered by the Court and Commission to constitute 'possessions' for the purposes of Article 1 of the First Protocol to the Convention.¹⁰⁸ Second, as regards the relationship between the Convention and the European Patent Convention (and the EPO, which administers the latter instrument), in the *Heinz* case the Commission indicated that 'the transfer of powers

¹⁰² CESCR, *General Comment No. 17: The Right of Everyone to Benefit from the Protection of the Moral and Material Interests Resulting from Any Scientific, Literary or Artistic Production of Which He or She Is the Author (Art 15(1))*, 21 November 2005, E/C.12/GC/17.

¹⁰³ So, for example, there were no hits for 'material safeguard for the freedom of scientific research' or 'preventing misappropriation of another's investment'.

¹⁰⁴ *Anheuser-Busch Inc v Portugal* 45 EHRR 830 at paras 72, 78, agreeing with the Commission in *Smith Kline and French Laboratories Ltd v The Netherlands* (1990) DR 66.

¹⁰⁵ *Melnichuk v Ukraine* Application No. 28743/03, 5 July 2005.

¹⁰⁶ *Smith Kline*, supra n. 104.

¹⁰⁷ *Paefgen GmbH v Germany* Application Nos. 25379/04, 21688/05, 21722/05 and 21770/05, 18 September 2007.

¹⁰⁸ In *Anheuser-Busch Inc*, supra n. 104 at para. 72, the Grand Chamber held that that Article 1 of Protocol 1 'is applicable to intellectual property as such'.

to an international organisation is not incompatible with the [ECHR] provided that within that organisation fundamental rights will receive an *equivalent* protection’.¹⁰⁹ This presumption of equivalence has been confirmed by the Grand Chamber,¹¹⁰ and subsequently held sway in *Rambus Inc v Germany*, a case which dealt with a private company’s European patent in the area of chip technology. It was however noted that the presumption:

could be rebutted, if in the circumstances of a particular case, it was considered that the protection of Convention rights was manifestly deficient... [I]n such a case, the interest of international cooperation would be outweighed by the Convention’s role as a “constitutional instrument of European public order in the field of human rights”.¹¹¹

5. What We Found

A great deal of what we did find emerged from the case law on one Article: Article 8, which provides a qualified or non-absolute right to respect for private and family life, home and correspondence. Our findings are reported below. First, however, we look at how the Court has described ‘new technologies’, and the advice it has given to contracting parties vis-à-vis its concerns about such technologies.

A. What, According To The Court, Is A New Technology? And What Are The Court’s Concerns About Such Technologies?

¹⁰⁹ *Heinz v the Contracting Parties also parties to the European Patent Convention* (1994) DR 76-A 125 (emphasis added).

¹¹⁰ *Bosphorus Hava Yollari Turizm Ve Ticaret Anonim Şirketi v Ireland* 2005-VI; 42 EHRR 1 at para. 155.

¹¹¹ *Rambus Inc v Germany* Application No. 40382/04, 16 June 2009.

The Court has not defined ‘new technologies’. Moreover, it rarely uses the word ‘new’ in conjunction with either an individual technology or technologies more generally: it speaks instead of technologies undergoing ‘rapid development’,¹¹² of ‘the technology available for use ... continually becoming more sophisticated’.¹¹³

In *Saunders v United Kingdom*, ‘our modern societies’ were described, in a dissenting opinion, as ‘information societies’.¹¹⁴ The opinion goes on to note that ‘all of us, government agencies as well as citizens, to a large extent depend on various kinds of information’ and that it is therefore ‘[n]o wonder that fraud in multiple forms is the bane of our societies’: such frauds are, it said, ‘all the more tempting since our computerised world with its manifold cryptographic devices makes it much easier to effectively hide them’.¹¹⁵ The Court returned to the theme of crime and ‘our computerised world’ in *KU v Finland*, where it noted that ‘[t]he rapid development of telecommunications technologies (in particular the Internet) in recent decades has led to the emergence of new types of crime and has also enabled the commission of traditional crimes by means of new technologies’.¹¹⁶

In its judgment in *S and Marper*, the Court accepted that ‘the fight against crime’—especially against organised crime and terrorism—‘depends to a great extent on the use

¹¹² *KU v Finland* Application No. 2872/02, 2 December 2008 at para. 22.

¹¹³ *Kruslin v France* A 176 (1990); 12 EHRR 547 at para. 33. See also *Kopp v Switzerland* 1998-II; 27 EHRR 91 at para. 72.

¹¹⁴ *Supra* n. 75 (dissenting opinion of Judge Martens joined by Judge Kuris).

¹¹⁵ *Ibid.* See relatedly *Timurtas v Turkey* 2000-VI; 33 EHRR 121 at para. 66, wherein the Court accepted that a ‘photocopied document should be subjected to close scrutiny before it can be accepted as a true copy of an original, the more so as it is undeniably true that modern technological devices can be employed to forge, or to tamper with, documents’.

¹¹⁶ *Supra* n. 112 at para. 22. In *Times Newspapers Ltd v United Kingdom* Application Nos 3002/03 and 23676/03, 10 March 2009, at para. 27, the Court recognised that the ‘Internet plays an important role in enhancing the public’s access to news and facilitating the dissemination of information generally’.

of modern scientific techniques of investigation and identification’,¹¹⁷ in particular techniques of DNA analysis. This, it said, was ‘beyond dispute’.¹¹⁸ Earlier in *Peck v United Kingdom*, the Court had acknowledged the usefulness of CCTV in tackling crime,¹¹⁹ and it has also accepted that the use of secret measures of surveillance—to intercept mail, telephone and email communications—may be necessary in a democratic society.¹²⁰ But in a departure from its standard practice, and in recognition of ‘the particular features of secret surveillance measures and the importance of ensuring effective control and supervision of them’,¹²¹ the Court has been willing to allow *general* challenges to legislative regimes and practices governing this area.¹²² The Court’s position is that the mere existence of legislation which allows secret monitoring of communications creates a surveillance threat for all those to whom the legislation might be applied. The Court has also been rigorous in its application of the ‘in accordance with the law’ requirement in this field.¹²³

Our search suggests that references to the pace of change have occurred most often in the case law on Article 8. In *S and Marper*, for example, the Court noted the ‘rapid pace of developments in the field of genetics and information technology’ and said that it could not ‘discount the possibility that in the future the private-life interests bound up with genetic information may be adversely affected in novel ways or in a manner

¹¹⁷ Supra n. 3 at para. 105. The Court also noted that states have made ‘rapid and marked progress’ in using DNA information to facilitate determinations of innocence or guilt.

¹¹⁸ Ibid.

¹¹⁹ Supra n. 4 at para. 79.

¹²⁰ See, e.g., *Klass and Others v Germany* A 28 (1978); 2 EHRR 214 at para. 48.

¹²¹ *Kennedy v United Kingdom*, supra n. 6 at para. 118.

¹²² The approach was set out in *Klass*, supra n. 120 at paras. 34-38 and 41. For examples of its application, see *Weber and Saravia v Germany* 2006-XI; 46 EHRR SE5; and *Liberty and Others v United Kingdom*, supra n. 6.

¹²³ Infra main text at nn. 208-210.

which cannot be anticipated with precision today'.¹²⁴ It also issued a warning to technology-hungry states, emphasising that the take-up of new technologies in the criminal justice sphere must not lead to Article 8 becoming 'unacceptably weakened'.¹²⁵ Earlier in *Kruslin v France*,¹²⁶ the Court had taken a look at tapping and other modes of intercepting telephone conversations, describing such interceptions as a serious interference with private life and correspondence, and calling for 'clear, detailed rules on the subject, especially as the technology available for use is continually becoming more sophisticated'.¹²⁷ Furthermore, as far back as 1984, Judge Pettiti in a concurring opinion in *Malone v United Kingdom* noted that the Convention 'protects the community of men' and that 'man in our times has a need to preserve his identity, to refuse the total transparency of society, to maintain the privacy of his personality'.¹²⁸ Invoking the Court's role as 'guardian of the Convention', he emphasised that one of the ways in which the Court fulfils this role is 'by investing Article 8 with its full dimension and by limiting the margin of appreciation especially in those areas where the individual is more and more vulnerable as a result of modern technology'.¹²⁹ He spoke of the role of others too, describing the 'mission' of the Council of Europe and its organs as being 'to prevent the establishment of systems and methods that would allow "Big Brother" to become master of the citizen's private life'.¹³⁰

¹²⁴ Supra n. 3 at para. 71.

¹²⁵ Ibid. at para. 112. For the argument that an 'emerging crime society' requires us to rethink legal protection and embed 'organised distrust' throughout the criminal justice system, see Koops, 'Technology and the Crime Society: Rethinking Legal Protection' (2009) 1 *Law, Innovation and Technology* 93.

¹²⁶ Supra n. 113.

¹²⁷ Ibid. at para. 33.

¹²⁸ Supra n. 7.

¹²⁹ Ibid.

¹³⁰ Ibid.

The right to **freedom of expression**, protected by Article 10, is one of the things that keeps ‘Big Brother’ at bay, and as the Convention institutions have emphasised this freedom has other benefits as well. For example, in *HUH v Switzerland* the Commission described freedom of opinion as a necessity in a democratic society ‘in that it can make the authorities and science discover problems of public health’.¹³¹ Later in *Hertel v Switzerland*, in describing health dangers posed by microwave ovens as ‘a sphere in which it is unlikely that any certainty exists’, the Court emphasised that ‘it would be particularly unreasonable to restrict freedom of expression only to generally accepted ideas’.¹³² The general point arising from *Hertel* is that where commercial expression relates to a matter of public interest, the Court adopts a more stringent level of review than is the norm in commercial expression cases—put differently, the state’s margin of appreciation is not so wide when commercial expression relates to a matter of public interest.¹³³

We shall be returning to the margin of appreciation in our discussion of Article 8 case law. Here however it is worth noting that the Court’s use of this doctrine tends to make identification of general trends both difficult and dangerous. Our terrain—cases concerning new technologies—is distinctly treacherous. We have already mentioned that in cases on environmental issues the Court grants a wide margin of appreciation to the state. And shortly we shall see that another standard trigger is the absence of consensus within the member states of the Council of Europe, ‘either as to the relative importance of

¹³¹ Application No. 25181/94, 27 November 1996.

¹³² *Supra* n. 73 at para. 50.

¹³³ On the standard, low-level review, see e.g. *Markt Intern Verlag GmbH and Klaus Beerman v Germany* 12 EHRR 161; but see too the dissenting opinion of Judge Pettiti.

the interest at stake or as to the best means of protecting it, particularly where the case raises sensitive moral or ethical issues’.¹³⁴

Still, we need to hazard some pointers. In so doing we shall focus on signals for domestic authorities, starting with *Tavli v Turkey*¹³⁵ where there was advice for domestic courts facing the challenges of ‘our modern societies’. *Tavli* concerned an applicant who wanted to use newly-available DNA evidence in order to disclaim paternity but was refused a rehearing on the ground that ‘scientific progress’ was not a condition for retrial under the state’s code of civil procedure. In finding a violation of Article 8,¹³⁶ the Court advised the domestic courts that they should be interpreting the existing legislation ‘in light of scientific progress and the social repercussions that follow’.¹³⁷

The case of *KU v Finland*¹³⁸ suggests that awareness of scientific progress and its social repercussions is also a prerequisite for legislators. This case arose as a result of an advert of a sexual nature about the applicant on an Internet dating site. At the time of the posting, the applicant was only 12 years old. The advert gave his age, year of birth and a description of his physical characteristics, as well as a link to his web page where his picture could be found, and it said that he was looking for an intimate relationship with another boy, of his own age or older ‘to show him the way’. The applicant became aware of the posting when he received an email from a man, offering to meet him. Under the

¹³⁴ *Evans v United Kingdom*, supra n. 11 at para. 77.

¹³⁵ 48 EHRR 11.

¹³⁶ The Court noted that (at para. 34) that ‘just as the applicant has a legitimate right to have at least the opportunity to deny paternity of a child who, according to scientific evidence, was not his own, [that child] has also an interest in knowing the identity of her biological father’.

¹³⁷ *Ibid.* at para. 36. Previously the Court had held that allowing a legal presumption to prevail over biological and social reality, without regard to both established facts and the wishes of those concerned, is not compatible with the state’s obligation to secure ‘respect’ for private and family life: *Kroon and Others v The Netherlands* A 297-C (1994); 19 EHRR 263 at para. 40.

¹³⁸ Supra n. 112.

law in Finland, at the time, the Internet provider could not be required to provide details of the identity of the person who had posted the advert.

The Court, in a unanimous judgment, held that the applicant's Article 8 right to respect for private life had been violated. It did note the difficulties of policing 'modern societies' and, linked to this, it acknowledged that the state's positive obligation under Article 8 to criminalise offences against the person, and to reinforce such criminalisation via effective investigation and prosecution, must not generate an impossible or disproportionate burden on legislators. It also noted the government's argument that any legislative failing needed to be seen 'in its social context at the time'.¹³⁹ But it went on to emphasise that, by 1999, when the incident took place:

it was well-known that the Internet, precisely because of its anonymous character, could be used for criminal purposes. ... Also the widespread problem of child sexual abuse had become well-known over the preceding decade. Therefore, it cannot be said that the respondent Government did not have the opportunity to put in place a system to protect child victims from being exposed as targets for paedophiliac approaches via the Internet.¹⁴⁰

The Court made two points of interest with respect to **freedom of expression**, **confidentiality** and **privacy**. It noted, first, that although respect for the freedom of expression and privacy of service-users must be guaranteed, any such guarantees could not be absolute: they might have to give way in order, for example, to protect the rights and freedoms of others, or to prevent crime. An overriding requirement of confidentiality of Internet services was unacceptable and it was 'the task of the legislator to provide a framework for reconciling the various claims which compete for protection in this

¹³⁹ Ibid. at para. 48.

¹⁴⁰ Ibid.

context’.¹⁴¹ Second, recalling the facts of the case—the posting of an advertisement of a sexual nature about a 12 year old boy on an Internet dating site—the Court left open the question whether such conduct, given its ‘reprehensible nature’, could in any event attract protection under Articles 8 and 10.¹⁴²

Legislators will also want to note that in another area of new technologies—medically assisted procreation—the Court has made it clear that contracting states have no obligation under the Convention to permit such technologies.¹⁴³ Should they choose to do so however, they will need to be alert to the prohibition on **discrimination** enshrined in Article 14. This comes through clearly in *SH and Others v Austria*¹⁴⁴ wherein the state had barred certain forms of IVF but not others and was unable to justify the difference in treatment. The problem of discrimination surfaced in a different context in *S and Marper v United Kingdom*,¹⁴⁵ which concerned a national DNA database—specifically, the indefinite retention, without consent, of the fingerprints, cellular samples and DNA profiles of persons who had been acquitted, or whose cases had been dropped. The Court did not consider the complaint under Article 14 but, in its discussion of Article 8(2), it made two points that are relevant here. First, it expressed concern about the risk of stigmatisation, ‘stemming from the fact that persons in the position of the applicants, who

¹⁴¹ Ibid. at para. 49.

¹⁴² Ibid.

¹⁴³ See *SH and Others v Austria*, Application No. 57813/00, 15 November 2007 where the Court rejected the claims of the applicants, two married couples, that limitations on access to ARTs violated their Article 12 right to found a family. The case did proceed under Article 8, in conjunction with Article 14. The question arose too in *Dickson v UK* 46 EHRR 927 at para. 86, where the husband was a prisoner and he and his wife were seeking access to artificial insemination in order to try for a child, but the Grand Chamber decided the case under Article 8 and, because it saw no separate issues arising under Article 12, it made no examination of the applicants’ complaint under the latter Article. Article 12 does however mean that the state cannot interfere with married couples having children without assistance: a state programme of compulsory sterilisation or abortion would be a blatant violation of the ECHR.

¹⁴⁴ Supra n. 62.

¹⁴⁵ Supra n. 3.

have not been convicted of any offence and are entitled to the presumption of innocence, are treated in the same way as convicted persons’.¹⁴⁶ Second, it endorsed the view of the UK-based Nuffield Council on Bioethics noting that, as applied, the retention policy had led to the over-representation in the database of ‘young persons and ethnic minorities, who have not been convicted of any crime’.¹⁴⁷

To round out this discussion of non-discrimination we need to revert to ARTs; specifically, the sad case of *Evans v United Kingdom*.¹⁴⁸ Here six frozen embryos represented the applicant’s only chance of becoming a genetic parent. These embryos had been created, using the applicant’s eggs and the sperm of her then-fiancé, before she underwent cancer treatment which destroyed her fertility. Her (by now) ex-fiancé triggered the case when he refused consent to the use or continued storage of the embryos.¹⁴⁹ under the domestic law on ARTs, which placed consent at centre-stage, this meant that the embryos had to be destroyed. Evans challenged that law, complaining *inter alia* of discrimination contrary to Article 14 taken in conjunction with the rights to respect for private and family life under Article 8. She argued that the consent rules prevented her from ever becoming a parent ‘in the genetic sense’. Moreover, they were discriminatory because they subjected her, an infertile woman, to a ‘male veto’, whereas a woman who could conceive without assistance could make reproductive decisions without reference to the genetic father.

Four courts considered Evans’ case—the High Court and Court of Appeal in England, and a Chamber and Grand Chamber of the Strasbourg Court—and all four

¹⁴⁶ Ibid. at para. 42.

¹⁴⁷ Ibid. at para. 44.

¹⁴⁸ Supra n. 11.

¹⁴⁹ There was dispute as to whether the ex-fiancé’s action was to be characterised as a refusal of consent, or a withdrawal of it. The distinction had no impact on the Convention issues.

decided against her.¹⁵⁰ Although the Article 14 point was not discussed at Strasbourg,¹⁵¹ the facts of the case are enough for us to be able to frame the overarching question: namely, is gender neutrality—that is, equal treatment of women and men—the appropriate way to regulate ARTs?¹⁵² *Evans* demonstrates just how difficult a question that is. Relatedly, we might ask: what place should be accorded to bright-line rules concerning consent in any ART regulatory regime? In short, is it either necessary or proportionate to ‘permit of no exceptions in the provision of a veto on the use of embryos to either gamete provider’?¹⁵³

The *Evans* case comes up again later in our discussion of Article 8. Here though we need to mention another aspect of the case that will be of interest to national lawmakers: namely, when Article 2(1) says that ‘[e]veryone’s **right to life** shall be protected by law’, does ‘everyone’ encompass the human embryo? In *Evans* both the Chamber and Grand Chamber held that Article 2 was not violated by a rule that required the destruction of frozen embryos once consent to their use or continued storage had been withdrawn by one of the gamete donors.¹⁵⁴ This decision was not a surprise, however, given that in *Vo v France* the Grand Chamber had held that, ‘in the absence of any

¹⁵⁰ See, respectively, *Evans v Amicus Healthcare Ltd* [2003] EWHC (Fam) 2161; *Evans v Amicus Healthcare Ltd* [2004] EWCA (Civ) 727; and *Evans v UK* 43 EHRR 21 (Chamber) and *Evans v UK* [GC], supra n. 11.

¹⁵¹ Bar in a joint dissenting opinion by Judges Türmen, Tsatsa-Nikolovska, Spielmann and Ziemele in the Grand Chamber. The majority in the Grand Chamber, echoing both the Chamber and the majority in the EWCA, noted that the reasons for finding that Article 8 had not been violated also formed a basis for holding that there had been no violation of Article 14.

¹⁵² For discussion see, e.g., Thornton, ‘European Court of Human Rights; Consent to IVF Treatment’ (2008) 6 *ICON* 317. See also *SH v Austria*, supra n. 62 at paras 50-51 where the Court rejected the state’s argument that the prohibition of specific ART techniques was justified by the need to prevent the exploitation and humiliation of women.

¹⁵³ Supra n. 11 at para. 61. See the joint dissenting opinion of Judges Traja and Mijović in the Chamber, proposing a ‘case-specific’ test to balance the rights of gamete providers, including a requirement that the party who wishes to use the embryos ‘does not intend to have recourse to a surrogate mother’.

¹⁵⁴ See respectively *Evans v United Kingdom*, supra n. 150 at paras 46-47 (Chamber); *Evans v United Kingdom*, supra n. 11 at paras 53-56.

European consensus on the scientific and legal definition of the beginning of life, the issue of when the right to life begins comes within the margin of appreciation which the Court generally considers that States should enjoy in this sphere'.¹⁵⁵

We turn finally to the most startling advice—startling both because it stems from the Court's 'greening of human rights law',¹⁵⁶ a move that could not have been guaranteed, and because the advice itself is so robust. Articles 2 and 8 are our starting-point here.¹⁵⁷ It is from these that the Court has constructed a range of positive 'environmental' obligations: thus, states must regulate and control hazardous activities (whether public or private¹⁵⁸) where these are impairing Convention rights or might impair them, and they must enforce such regulations; states must also provide access to information on serious environmental risks (indeed, in some instances, they may have a duty to inform affected parties¹⁵⁹); and they must secure both public participation in environmental decision-making and access to justice in environmental cases.

Together, these obligations amount to 'undeniable progress' towards the 'opening up of an environmental horizon of human rights'.¹⁶⁰ More prosaically, they mean that our search had high-quality hits with a number of keywords: notably, **public participation** in decision-making, and linked to this **access to information** and **access to justice**—terms

¹⁵⁵ Supra n. 63 at para. 82.

¹⁵⁶ Boyle, 'Human Rights or Environmental Rights: A Reassessment' (2007) 18 *Fordham Environmental Law Review* 471 at 471.

¹⁵⁷ In the case of the right of access to information, Protocol No. 1 is also relevant. As regards Article 2, see *LCB v Turkey* 1998-III; 27 EHRR 212; and *Öneryildiz v Turkey* 2004-XIII; 41 EHRR 20. As regards Article 8, see in particular *López Ostra v Spain* A 303-C (1994); 20 EHRR 277; *Guerra v Italy* 1998-I; 26 EHRR 357; and *Taşkın and Others v Turkey*, supra n. 94.

¹⁵⁸ See, e.g., *Öneryildiz v Turkey* *ibid.* at para. 71. In *Osman v UK* 1998-VIII; 29 EHRR 245 at para. 115 it was held that an obligation to take preventive measures applies, subject to certain conditions, when an individual's life is at risk 'from the criminal acts of another individual'. Note that in medical negligence cases it is the procedural obligation to investigate that applies, not the *Osman* obligation.

¹⁵⁹ *Guerra v Italy*, supra n. 157.

¹⁶⁰ Francioni, 'International Human Rights in an Environmental Horizon' (2010) 50 *European Journal of International Law* 41 at 50.

that reflect the title of the **Aarhus Convention**.¹⁶¹ The most interesting hit was *Taşkın and Others v Turkey*, a case under Article 8. Here an administrative authority had failed to comply with a judicial decision which had revoked the permit for a gold-mining operation because of its adverse effects on the environment. A secret decision by the authority, in violation of the court order, allowed production to continue at the mine.¹⁶² The Strasbourg Court, finding a violation of Article 8, made two key points. First, there has to be *effective enforcement* of measures designed to protect rights; simply having the measures in place is not enough.¹⁶³ Second, states have a range of *procedural duties*; specifically, the Court held that:

whilst Article 8 contains no explicit procedural requirement, the decision-making process leading to measures of interference must be fair and such as to afford due respect to the interests of the individual as safeguarded by Article 8.¹⁶⁴

This seems to be another way of saying that, to comply with Article 8, affected individuals must be able to participate in the decision-making process. The Court also spells out steps that should be taken by states where ‘complex issues of environmental and economic policy’ have to be determined: ‘the decision-making process must firstly involve appropriate investigations and studies in order to allow them to predict and evaluate in advance the effects of those activities which might damage the environment and infringe individuals’ rights and to enable them to strike a fair balance between the

¹⁶¹ Supra n. 51. On Aarhus, see, e.g., Boisson de Chazournes ‘New Technologies, the Precautionary Principle, and Public Participation’, in Murphy, supra n. 20 at 161.

¹⁶² *Taşkın and Others*, supra n. 94 at para. 120.

¹⁶³ Ibid. at paras 124-25 noting that: ‘Where administrative authorities refuse or fail to comply, or even delay doing so, the guarantees enjoyed by a litigant during the judicial phase of the proceedings are rendered devoid of purpose.’

¹⁶⁴ Ibid. at para. 118.

various conflicting interests at stake'.¹⁶⁵ And the Court did not stop there: it deepened its 'greening of human rights law' with two further requirements: first, information concerning environmental risks must be available to those who are likely to be affected, and second such individuals 'must also be able to appeal to the courts, against any decision, act or omission where they consider that their interests or their comments have not been given sufficient weight in the decision-making process'.¹⁶⁶ How to sum up? Well, put shortly, with just one case—*Taşkın*—the Court has shown its own capacity for innovation and assigned a considerable amount of ongoing human rights work to the contracting states.

B. Article 8 of the Convention

We turn finally to Article 8 which recurred again and again in our search, providing more direct hits than any other Article in the Convention. That did not surprise us: for starters, Article 8 encompasses a wide range of interests—namely, 'private and family life, home and correspondence'. Secondly, the Court has favoured an expansive approach to those interests, not least when faced with evidence of technological change and the social repercussions that follow. Thirdly, this expansiveness has been reinforced by the Court's insistence that this Article, which speaks of 'the right to respect' for private and family life, home and correspondence, places not just negative obligations on the contracting states but positive ones too.¹⁶⁷ This in turn has meant that the Court has had to engage

¹⁶⁵ Ibid. at para. 119.

¹⁶⁶ Ibid.

¹⁶⁷ *X and Y v Netherlands* A 91 (1985); 8 EHRR 235 at para. 23. The question of when this obligation might require the state to criminalise particular behaviour remains open: as Harris et al., *supra* n. 43 at 384-85, have noted: 'it is difficult to ... to predict, for example, whether the Court would find positive

with the question of when the state, as part of those positive obligations, may need to limit other Convention rights in order to secure an Article 8 one. So, for example, in *Von Hannover v Germany* concerning the publication of photographs of a well-known public figure, the Court held that the state is under a positive obligation to protect individuals from invasion of their privacy by other individuals, and that this may necessitate measures limiting press freedom under Article 10.¹⁶⁸ Fourth and finally the volume of cases on Article 8 has allowed the Court considerable scope to refine its approach towards the margin of appreciation and the fair balance principle, both of which arise not just in connection with the requirement under Article 8(2) that to be justified an interference must be, *inter alia*, ‘necessary in a democratic society’ but also in connection with the state’s positive obligations under Article 8(1).

(i) Private and family life, home and correspondence

We begin by looking in turn at the four interests protected by Article 8(1)—namely, ‘private and family life, home and correspondence’.

Private life

As to ‘private life’, in *Peck v United Kingdom*, a case concerning disclosure of CCTV footage to the media (which resulted in images of the applicant being published and broadcast widely), the Court advised that the term is a broad one, ‘not susceptible to

obligations to criminalize private surveillance or data collection which impinged upon an individual’s rights to private life or correspondence, where civil remedies already exist’.

¹⁶⁸ 2004-VI; 43 EHRR 1. Note however that the Court accepts that ‘the choice of the means calculated to secure compliance with Article 8 in the sphere of the relations of individuals between themselves is in principle a matter that falls within the Contracting States’ margin of appreciation’: see *Odièvre v France* 2003-III; 38 EHRR 871 at para. 46.

exhaustive definition'.¹⁶⁹ Fortunately, the Court has provided some pointers:¹⁷⁰ here we concentrate on those activities and interests under 'private life' that have an obvious new technologies angle.¹⁷¹ There are a number of these, including the decisions to have and not to have a child, which in turn include both the decision to become a parent 'in the genetic sense'¹⁷² and the decision to use medically-assisted procreation (where the state has chosen to legislate to allow such technologies).¹⁷³ Such decisions fall under 'private life' because they are central to the '**physical and psychological integrity of the person**'.¹⁷⁴ 'Integrity' has other technology-relevant aspects too: so, for example, environmental hazards—such as pollution—are covered by 'private life' because they can affect the physical well-being of the person.¹⁷⁵ The Court has also made it clear that **consent** is a pre-requisite if medical treatment is not to amount to a violation of the integrity of the person.¹⁷⁶

Private life is not, however, restricted to integrity. It also encompasses each of the following: identity; a 'zone' or space of privacy; and the collection, storage or use of personal information, including bio-information.¹⁷⁷ In what follows we look briefly at

¹⁶⁹ *Peck v United Kingdom*, supra n. 4 at para. 57.

¹⁷⁰ See, e.g., *Reklos and Davourlis v Greece* Application No. 1234/05, 15 January 2009, at para. 39, in which the Court said that it encompasses 'the right to identity ... and the right to personal development, whether in terms of personality ... or of personal autonomy, which is an important principle underlying the interpretation of the Article 8 guarantees'.

¹⁷¹ For an account encompassing the full range of activities and interests, see e.g. Harris et al., supra n. 43 at 361ff.

¹⁷² *Evans v United Kingdom*, supra n. 11 at paras 71-72.

¹⁷³ *SH v Austria*, supra n. 62; *Dickson v UK* 46 EHRR 927. Article 8 cannot be used to compel the state to provide ARTs: as pointed out in *Fretté v France*, supra n. 82 at para. 32, 'the provisions of Article 8 do not guarantee ... the right to found a family'.

¹⁷⁴ *Pretty v United Kingdom*, supra n. 76 at para. 61. Complaints concerning an interference with integrity of the person have also been dealt with under Article 3: see, e.g., *Jalloh v Germany*, supra n. 75.

¹⁷⁵ *López Ostra v Spain*, supra n. 157; *Guerra v Italy*, supra n. 157.

¹⁷⁶ See, e.g., *Pretty v United Kingdom*, supra n. 76.

¹⁷⁷ Adopting the schema used by Harris et al., supra n. 43 at 365, and noting that they emphasise that '[t]hese categories are not closed and, doubtless, the cases could equally profitably be arranged under different heads'.

each aspect in turn, starting with identity. The Court has said that ‘private life’ embraces ‘multiple aspects of the person’s physical and social identity’.¹⁷⁸ To pin down some of these, we can look to the majority judgment in *SH and Others v Austria*,¹⁷⁹ which provides a useful summary. It begins by reiterating the principle that respect for private life ‘requires that everyone should be able to establish details of their identity as individual human beings’.¹⁸⁰ Such information has, it says, ‘formative implications’¹⁸¹ for an individual’s personality. It goes on to note that, although not an absolute entitlement, obtaining information necessary to ‘discover the truth concerning important aspects of one’s personal identity, such as the identity of one’s parents’,¹⁸² falls within respect for private life. So, for example, in *Odièvre v France*, where the applicant challenged the practice of ‘anonymous birth’ and called for the state to disclose information concerning her genetic parents, the Grand Chamber accepted that her claim to know her personal history fell within Article 8(1),¹⁸³ noting that ‘birth, and in particular the circumstances in which a child is born, forms part of a child’s, and subsequently the adult’s, private life guaranteed by Article 8 of the Convention’.¹⁸⁴

The next dimension of private life—the ‘zone’ or space of privacy—can be dealt with pretty briefly. From a new technologies’ perspective, there are just two points of

¹⁷⁸ *Mikulić v Croatia* Application No. 53176/99, 7 February 2002 at para. 53. Brownsword, ‘Friends, Romans, Countrymen: Is there a Universal Right to Identity?’ (2009) 1 *Law, Innovation and Technology* 223 look at the question whether there is a universal right to identity.

¹⁷⁹ *Supra* n. 62.

¹⁸⁰ *Ibid.* at para. 17.

¹⁸¹ *Ibid.* See also *Mikulić*, *supra* n. 178 at paras 53-54.

¹⁸² *Ibid.*

¹⁸³ It fell within ‘private life’, but not ‘family life’: *supra* n. 168 at para. 28. The Court’s decided that there had been no violation of the Convention in that the state’s rules achieved a fair balance between the private and public interests involved. For criticism of the decision, see Callus, ‘Tempered Hope? A Qualified Right to Know One’s Genetic Origin’ (2004) 67 *Modern Law Review* 658.

¹⁸⁴ *Ibid.* at para. 29.

note: first, as demonstrated by *Von Hannover v Germany*,¹⁸⁵ where publication of photographs of the applicant, a well-known figure, going about her daily life fell within ‘private life’, even public figures are entitled to a zone of privacy. Moreover, in order to protect the zone of privacy, states may have to adopt measures to protect a person’s picture against abuse by others; states need, in other words, to do more than abstain from interfering in the zone of privacy.¹⁸⁶ Second, although complaints about environmental hazards, on the one hand, and secret surveillance on the other, proceed more often under other elements of Article 8, they have also succeeded under the ‘zone of privacy’ interest.¹⁸⁷

The final dimension of private life we want to look at concerns the collection, storage or use of personal information. This has come before the Court quite a bit; moreover, the Court’s approach towards **data protection** has generally been very robust. Information about an individual’s health, and ethnic identity, have been described as ‘important’ elements of private life,¹⁸⁸ and the Court has endorsed the view that ‘there can be little if anything, more private to the individual than the knowledge of his genetic makeup’.¹⁸⁹ Additionally, even if the collection of personal data can be justified, this does

¹⁸⁵ Supra n. 168 at para. 53.

¹⁸⁶ Ibid. at para. 57. See also *Reklos and Davourlis v Greece*, supra n. 170, a case where the offending images had not been published, which meant that the Court had to examine the right to the protection of one’s image. The Court held at para. 40 that ‘[a]s a person’s image is one of the characteristics attached to his or her personality, its effective protection presupposes ... obtaining the consent of the person concerned at the time the picture is taken and not simply if and when it is published. Otherwise an essential attribute of personality would be retained in the hands of a third party and the person concerned would have no control over any subsequent use of the image’.

¹⁸⁷ See respectively *López Ostra v Spain*, supra n. 157; *Malone v United Kingdom*, supra n. 7.

¹⁸⁸ See respectively *Z v Finland* 1997-I; 25 EHRR 371 at para. 71; *S and Marper v United Kingdom*, supra n. 3 at para. 66, making reference to Article 6 of the Data Protection Convention.

¹⁸⁹ *S and Marper v United Kingdom*, ibid. at para. 72 endorsing a view expressed by Baroness Hale in the UK House of Lords (now the Supreme Court).

not guarantee that its *use* or *retention* will also be acceptable to the Court.¹⁹⁰ Indeed the mere storage of data concerning an individual's private life may amount to an interference within the meaning of Article 8;¹⁹¹ the Court has taken the view that 'the subsequent use of the stored information has no bearing on that finding'.¹⁹² And, as noted in *Rotaru v Romania*, refusing to allow an opportunity for information relating to an individual's private life to be refuted may also amount to an interference under Article 8.¹⁹³

To gain a better understanding of the Court's position we can look at *S and Marper*,¹⁹⁴ where the applicants complained that the indefinite retention of their fingerprints, cellular samples and DNA profiles on a national database constituted an unjustified interference with their right to respect for private life under Article 8. Neither applicant had been convicted of a crime (S, a minor, had been acquitted, and the charges against Marper had been dropped), and neither had consented to the indefinite retention of the data. In assessing whether the retention interfered with the applicants' rights, the Court—in line with its previous practice¹⁹⁵—opted for separate consideration of fingerprints on the one hand, and the samples and profiles on the other. It did this because, as it said, '[i]t is common ground that fingerprints do not contain as much information as either cellular samples or DNA profiles'.¹⁹⁶ As between the samples and the profiles, the Court noted that retention of the former raised more serious concerns.

¹⁹⁰ See, e.g., *Peck v United Kingdom*, supra n. 4 at para. 59 for criteria the Court takes into account in determining whether personal information retained by the authorities involves private-life interests.

¹⁹¹ *Leander v Sweden*, supra n. 68.

¹⁹² *Amann v Switzerland* 2000-II; 30 EHRR 843 at para. 69.

¹⁹³ *Rotaru v Romania* 2000-V at para. 46.

¹⁹⁴ Supra n. 3.

¹⁹⁵ See in particular *Van der Velden v Netherlands* Application no. 29514/05, 7 December 2005.

¹⁹⁶ Supra n. 3 at para. 78.

There were, the Court said, ‘legitimate concerns about the conceivable use of cellular material in the future’; additionally, such samples were of a ‘highly personal nature’ and contained ‘much sensitive information about an individual, including information about his or her health’. Concurring with a view expressed by Baroness Hale in the UK House of Lords, the Court also emphasised that cellular samples contain ‘a unique genetic code of great relevance to both the individual and his relatives’.¹⁹⁷ As a result, their retention *per se* was to be regarded as an interference with the applicants’ right to respect for their private lives.

Retention of their fingerprints, and DNA profiles, also constituted interferences under Article 8. As regards the latter, the Court rejected the state’s arguments that such profiles are ‘nothing more than a sequence of numbers ... containing information of a purely objective and irrefutable character and ... the identification of a subject only occurs in case of a match with another profile in the database’. It also rejected the argument that, because computer technology and expertise were needed to make the information intelligible, access to it would be limited. The Court took the view that the profiles’ capacity ‘to provide a means of identifying genetic relationships between individuals’ was enough for their retention *per se* to be regarded as an interference with the right to private life of the individuals concerned. It went on to note that because such profiles allow states to make inferences as to ethnic origin, which are then used in police investigations, their retention is ‘all the more sensitive and susceptible of affecting the right to private life’.¹⁹⁸

¹⁹⁷ Ibid. at paras 71-72.

¹⁹⁸ Ibid. at paras 74-76.

In assessing whether retention of the applicants' fingerprints constituted an interference under Article 8, the Court engaged in a review of its own case law. The UK government had sought to convince the Court that because fingerprints were neutral, objective and irrefutable, retaining them did not interfere with the applicants' rights. The Court agreed that fingerprints were both objective and irrefutable, but given that they contain 'unique information about the individual concerned allowing his or identification with precision in a wide range of circumstances', their retention without consent on a database was not to be regarded as either neutral or insignificant. It concluded that 'retention of fingerprints on the authorities' records in connection with an identified or identifiable individual may in itself give rise ... to important private-life concerns',¹⁹⁹ although it did accept that, as regards the question of *justification*, it might be necessary to distinguish between the collection, storage and use of fingerprints, on the one hand, and cellular samples and DNA profiles on the other.

Family life

We turn now from 'private life' to 'family life', the second interest protected by Article 8(1). Looking at this interest from a new technologies' angle, there is little to say bar the following. First, in those cases where the applicants, who were married couples, complained of an interference with Article 8 because of a specific prohibition on, or refusal of, access to assisted reproductive technologies (in circumstances where the state has made provision for the use of such technologies), the Court has made it clear that it is not just private life, but also family life, that incorporates the right to respect for the

¹⁹⁹ Ibid. at paras 84-85.

decision to become a genetic parent. So, for example, in *Dickson v United Kingdom*, which concerned the refusal of facilities for artificial insemination to the applicants, a prisoner and his wife, the Court found that Article 8 was in play because the refusal of these facilities concerned the applicants' private and family lives, both of which incorporate the right to respect for the decision to become a genetic parent.²⁰⁰ It is important to note a second point, however: Article 8 does not safeguard 'the mere desire to found a family'.²⁰¹ The third and final point to be noted is that a biological link may not be enough to allow an applicant to claim a 'family life' interest: the Court looks for 'close personal ties', ties that demonstrate 'an emotional relationship between two beings and a desire to pursue that relationship',²⁰² and in *M v The Netherlands*, the Commission expressed the view that where a man had donated sperm only to enable a woman to become pregnant through artificial insemination, that alone did not give him a right to respect for family life with the child.²⁰³

Home and correspondence

The final two interests protected by Article 8(1) are 'home' and 'correspondence'. Our search threw up nothing with respect to 'home', bar two general points which could be pertinent in a new technologies' context: first, when a business or profession is conducted from a person's private residence that is covered by 'home';²⁰⁴ and second, noise,

²⁰⁰ *Dickson v United Kingdom*, supra n. 163 at para. 66; *SH and Others v Austria*, supra n. 62 at para. 3.

²⁰¹ *EB v France*, supra n. 84 at para. 41.

²⁰² *Odièvre v France*, supra n. 168 at para. 26.

²⁰³ (1993) 74 DR 120. See also *X, Y and Z v United Kingdom* 1997-II (law on donor anonymity in a transitional phase; hence, state had a wide margin of appreciation).

²⁰⁴ See, e.g., *Halford v United Kingdom* 1997-III; 24 EHRR 523.

emissions, smells or other similar forms of interference may amount to a breach of the right to respect for home if they prevent enjoyment of the amenities of home.²⁰⁵

‘Correspondence’ proved more fruitful: here our keywords secured a new-technologies’ hit as a result of *Copland v United Kingdom*,²⁰⁶ one of the cluster of cases that first drew us towards this project. In *Copland*, the applicant’s telephone, email and internet usage had been monitored during her employment at a local college, a statutory body administered by the state. The applicant was never advised that such monitoring might take place; she therefore had a reasonable expectation as to the privacy of both her phone calls and her email and internet usage. The Court unanimously found a violation of Article 8, noting that the collection and storage of personal information relating to the applicant through her use of the telephone, email and internet interfered with the right to respect for both correspondence and private life. The Court did accept that, on occasion, it might be legitimate for an employer to monitor and regulate employees’ use of such devices, but provided no elaboration on the point.

(ii) Positive and negative obligations: the margin of appreciation and the fair balance principle

Of course, the finding that one or more of ‘private and family life, home and correspondence’ is in play does not mean that there has been a violation of the Convention. There are two reasons for this. There is, first, the question whether there is a positive obligation inherent in ‘respect’ for the relevant interest, requiring the state to

²⁰⁵ See, e.g., *Hatton v United Kingdom* 2003-VIII; 37 EHRR 611 at para. 96.

²⁰⁶ *Supra* n. 5. Note also *Niemietz v Germany* A 251-B (1992); 16 EHRR 97, wherein a computer hard-disk was held to constitute ‘correspondence’.

take reasonable and appropriate measures to secure the rights protected by Article 8(1). And second—as made clear by Article 8(2)—a state may be able to justify an interference with Article 8(1) by showing that it is ‘in accordance with law’, in pursuit of a legitimate aim and ‘necessary in a democratic society’. It is to these aspects of Article 8 that we now turn, focusing exclusively on decisions and dicta that draw out the new technologies’ angle. Most of what we found concerns the question of proportionality—specifically, the fair balance principle and the doctrine of the margin of appreciation.²⁰⁷ We begin however with some brief comments on the Article 8(2) requirement that any interference must be ‘in accordance with the law’ and also in pursuit of a legitimate aim.

In accordance with the law and in pursuit of a legitimate aim

We look first at the former requirement, where almost all of the case law we encountered concerned telephone tapping, secret surveillance and covert intelligence-gathering, and the Court’s focus was the quality of the law in place, rather than the absence of law *per se*. We found relevant material in *S and Marper* too, the case concerning the DNA database. Noting that the approach applied in the surveillance context was ‘as essential ... in this context’,²⁰⁸ the Court went on to provide a summary of what it described as its ‘well-established case-law’,²⁰⁹ on ‘in accordance with law’. It indicated, first, that the requirement will only be met where three conditions are satisfied – the impugned measure must have some basis in domestic law; it must be compatible with the rule of law; and it must be adequately accessible and foreseeable. Second, to meet these

²⁰⁷ *Kroon and Others v The Netherlands*, supra n. 137 at para. 31.

²⁰⁸ Supra n. 3 at para. 9.

²⁰⁹ Ibid. at para. 95.

requirements, there must be both ‘clear, detailed rules governing the scope and application of measures’ and ‘minimum safeguards’ concerning, *inter alia*, ‘duration, storage, usage, access of third parties, procedures for preserving the integrity and confidentiality of data and procedures for its destruction’. The intention, in short, is that there should be ‘sufficient guarantees against the risk of abuse and arbitrariness’.²¹⁰

Staying with *S and Marper*, we can also get a sense of the second requirement: namely, that any interference must be in pursuit of a legitimate aim. What counts as such an aim is identified in Article 8(2) where the list includes public safety, the economic well-being of the country and the protection of health or morals. Here we offer three illustrations of this requirement. The first is from *S and Marper*, wherein the Court accepted that the retention of fingerprints and DNA information ‘pursues the legitimate purpose of the detection, and therefore, prevention of crime’.²¹¹ The second is listed in the Council of Europe’s *Manual on Human Rights and the Environment*: it states that one of the general principles applied in environmental cases under the ECHR is that ‘protection of the environment may be legitimate aim justifying interference with certain individual human rights’,²¹² including the right to property. The final example is *Kennedy v United Kingdom*, one of our original cluster of cases, wherein the Court reiterated that powers to instruct secret surveillance of citizens are only permitted under Article 8 ‘to the extent that they are strictly necessary for safeguarding democratic institutions’.²¹³

²¹⁰ *S and Marper v United Kingdom*, supra n. 3 at para. 99. See also *Kruslin v France*, supra n. 113 at paras 33, 35; *Rotaru v Romania*, supra n. 193 at paras 57-59; *Liberty and Others v United Kingdom*, supra n. 6 at paras 62-63.

²¹¹ *Ibid.* at para. 25 noting that ‘[w]hile the original taking of this information pursues the aim of linking a particular person to the particular crime of which he or she is suspected, its retention pursues the broader purpose of assisting in the identification of future offenders’.

²¹² Supra n. 95 at 7.

²¹³ Supra n. 6 at para. 153.

The fair balance principle and the margin of appreciation

We have already noted that states have both positive and negative obligations under Article 8. The Court's position is that 'the boundaries between [these obligations] do not lend themselves to precise definition'.²¹⁴ It has however indicated that '[t]he applicable principles are nonetheless similar. In particular, in both instances regard must be had to the fair balance which has to be struck between the competing interests; and in both contexts the State enjoys a certain margin of appreciation'.²¹⁵ For us, the question that arises is: what if anything in the Court's case law on fair balance and the margin of appreciation is pertinent to new technologies?

As regards the breadth of the margin of appreciation, *Evans v United Kingdom*,²¹⁶ which was handled as a case concerning the state's positive obligation, provides a useful summary of three key factors that may affect this matter. The first is that 'where a particularly important facet of an individual's existence or identity is at stake, the margin allowed to the State will be restricted'.²¹⁷ In *SH and Others*, 'the wish for a child' was named as 'one such particularly important facet',²¹⁸ and from *Evans* itself it is clear that becoming a genetic parent (which was what Natallie Evans wanted), and not becoming

²¹⁴ See, e.g., *Evans v United Kingdom*, supra n. 11 at para. 21.

²¹⁵ Ibid. But, as emphasised by Harris et al., supra n. 43 at 343, as regards positive obligations 'the process is to determine whether or not there is a right under the Convention'. By contrast, when it comes to interferences, 'the individual's right is already established' and so it is for the state to demonstrate that the inference is justified.

²¹⁶ Ibid. at para. 77. Compare the domestic courts who asked whether there had been an interference by the state with Evans' right to respect for her private life.

²¹⁷ Ibid.

²¹⁸ *SH and Others v Austria*, supra n. 62 at para. 4.

one (which was the outcome sought by her ex-fiancé), are both ‘particularly important facets’.

Second, the margin will be wider where ‘there is no consensus within the Member States of the Council of Europe, either as to the relative importance of the interest at stake or as to the best means of protecting it, particularly where the case raises sensitive moral or ethical issues’.²¹⁹ So, as we saw earlier, in *Vo v France* the Grand Chamber held that in the absence of any European consensus on the scientific and legal definition of the beginning of life, the issue of when the right to life begins comes within the margin of appreciation.²²⁰ In *Evans* a wide margin was afforded to the state both because ‘the use of IVF treatment gives rise to sensitive moral and ethical issues against a background of fast-moving medical and scientific developments’ and because the case raised questions which ‘touch on areas where there is no clear common ground amongst the Member States’.²²¹

A third factor affecting the breadth of the margin is whether the state has to strike a balance between competing private and public interests or Convention rights (‘the fair balance principle’).²²² In *Evans* and *SH and Others*, which concerned laws regulating ARTs, the Court noted this factor, emphasising that the state’s wide margin in principle extends ‘both to its decision to intervene in the area and, once having intervened, to the detailed rules it lays down in order to achieve a balance between the competing public and private interests’.²²³

²¹⁹ *Evans v United Kingdom*, supra n. 11 at para. 77.

²²⁰ Supra n. 63 at para. 82.

²²¹ Supra n. 11 at para. 81.

²²² Ibid.

²²³ Ibid. at para. 75; *SH and Others v Austria*, supra n. 62 at para. 28.

It would however be a mistake to assume that the Court is entirely hands-off: indeed, in *SH and Others* it reiterated that ‘differences in the approaches adopted by the Contracting States do not, as such, make any solution reached by a legislature acceptable’.²²⁴ A ‘blanket and indiscriminate’ approach is one solution that may draw criticism from the Court: so, for example, in *S and Marper* the Court was ‘struck by the blanket and indiscriminate nature of the power of retention [of bioinformation] in England and Wales’, and it insisted on ‘careful scrutiny’ of the retention regime regardless of the fact that ‘the level of interference with the applicants’ right to private life may be different for each of the three different categories of personal data retained’—namely, fingerprints, cellular samples and DNA profiles.²²⁵ It also gave short shrift to the state’s argument that, because the United Kingdom was a pioneer in the use of technology as a crime-detection tool, any comparison with other contracting states would be irrelevant.

By contrast, in *Evans*, where the context was consent and ARTs, the Court endorsed a bright-line rule, noting that the relevant legislation was ‘the culmination of an exceptionally detailed examination of the social, ethical and legal implications of developments in the field of human fertilisation and embryology, and the fruit of much reflection, consultation and debate’.²²⁶ The absolute nature of the law—the fact that it could not be disapplied in any circumstance—was not, ‘in itself, necessarily inconsistent with Article 8’.²²⁷ Thus, citing both principle (specifically, ‘respect for human dignity

²²⁴ Supra n. 62 at para. 69.

²²⁵ Supra n. 3 at paras 38-39. See also *SH v Austria*, supra n. 62 at para. 47: ‘concerns based on moral considerations or on social acceptability are not in themselves sufficient reasons for a complete ban on a specific artificial procreation technique such as ova donation.’

²²⁶ Supra n. 11 at para. 88.

²²⁷ Ibid. at para. 89.

and free will, as well as a desire to ensure a fair balance between the parties to IVF treatment’) and strong policy considerations (promoting ‘legal certainty’ and avoiding ‘problems of arbitrariness and inconsistency’ that would attach to a case-by-case approach), the Court chose to endorse the domestic law, finding that it neither upset the fair balance required by Article 8 nor exceeded the state’s wide margin of appreciation.²²⁸

6. Conclusion

The Court has observed, on many occasions, that the Convention is to be seen ‘a living instrument which must be interpreted in the light of present-day conditions’.²²⁹ That, to us, seemed a good omen as we commenced our new-technologies’ search of the Court’s case law. So, too, did the more prosaic fact that, as of 2009, the Court began communicating its interim measures via email.²³⁰ But the key question remains: did our hypothesis stand up to scrutiny? Did we find enough to be able to say that the Strasbourg Court is helping to frame the field of new technologies and human rights (or, more broadly, that of law and technology)?

We put to one side the question of who, or what, might count as benchmark against which to judge the Court’s performance. We also put to one side the qualifiers that come as standard in any discussion of the Court. Those qualifiers—most notably, the Court’s focus on individual cases and, in particular, on the facts of each application—certainly cannot be ignored; at the same time, however, there is a risk of becoming

²²⁸ Ibid. Cf. *Dickson v United Kingdom*, supra n. 143 concerning a policy on prisoner access to artificial insemination.

²²⁹ *Tyrer v United Kingdom* 2 EHRR 1 at para. 31.

²³⁰ *Paladi v Moldova* 47 EHRR 15. We were intrigued too that the Council of Europe has a Facebook page on the ECHR, and by the Court’s launch of a short Youtube animation on Convention rights as part of the 60th anniversary celebrations for the ECHR.

consumed by them. So, having cleared these preliminaries, where do we stand? Essentially as follows: it would, first of all, be wrong—premature—to take a chance on a characterisation of the Court’s stance on new technologies. To quote the title of this article, the Court’s decisions in this area are best seen as ‘works in progress’; they give direction on individual complaints but taken together they do not allow for a full characterisation of the Court’s stance.

That said, we can say that in this area there is evidence of more general trends—including the Court’s expansive approach to the interests protected by Article 8, its development of positive obligations and its apparent lack of enthusiasm for Article 12.²³¹ We have also seen plenty of evidence of classic concerns playing out in new-technologies mode. Thus, secret measures of surveillance, and more generally the use of new technologies in the criminal justice sphere (notably DNA databases), have been subject to robust scrutiny. Moreover, now that the EU Charter of Rights—which features an autonomous right to data protection—is part of the primary law of the Union, and the EU is to accede to the ECHR, we should expect that data protection will be major concern for European institutions in the coming years.²³² We can expect, too, that there will be some states keen to clarify the position vis-à-vis DNA databases—specifically, if human rights compliance is to be secure, who and what can be in the database, for how long and for what purpose? And, clearly as part of this, the Court is likely to be called upon to elaborate how precisely it views the difference between DNA samples and DNA profiles,

²³¹ Perhaps the best conclusion as regards Article 12 might be that, on the evidence of *Goodwin (Christine) v United Kingdom* 2002-VI; 35 EHRR 447 its rather moribund status could yet be reversed. On its potential as regards a ‘right to procreate’, see Eijkholt, ‘The Right to Found a Family as a Stillborn Right to Procreate’ (2010) 18 *Medical Law Review* 127.

²³² But see the cautionary note struck by De Schutter and Ringelheim, ‘Ethnic Profiling: A Rising Challenge for European Human Rights Law’ (2008) 71 *Modern Law Review* 358.

and whether for example a population-wide database would be acceptable if it is just profiles that are retained.

Non-discrimination, and protection of vulnerable groups, are other classic concerns that seem to be engaging the Court's attention in this field: think, for example, of *SH and Others v Austria*,²³³ and the references to both ethnic groups and minors in *S and Marper v United Kingdom*.²³⁴ But, looking in particular at *Evans v United Kingdom*,²³⁵ it is also clear that non-discrimination can be awfully difficult terrain— involving a clash of rights, in the context of hope, fear and personal tragedy, and a challenge to consent as the quintessential human rights-compliance measure. Another area needing fresh engagement is the obligations of wealthy, medically-advanced European states towards citizens of poorer countries. Work has commenced on the right to enjoy the benefits of scientific progress and its applications, and as part of this there is likely to be new engagement with the obligation of international co-operation and assistance, and the effects of the current intellectual property regime. But that is not enough: as demonstrated by *N v United Kingdom*,²³⁶ where the Court made it clear that Article 3 does not bar a contracting party from returning a seriously ill individual to her or his country of origin unless there are 'very exceptional circumstances' involving 'compelling humanitarian considerations', there is an urgent need for ongoing engagement with the complex question of our obligations towards both the nearby needy

²³³ Supra n. 62.

²³⁴ Supra n. 3.

²³⁵ Supra n. 11.

²³⁶ Supra n. 46. See also *D v United Kingdom* 1997-III; 24 EHRR 423.

and their distant counterparts.²³⁷ And, put bluntly, this is not something that European states and their citizens should be seeking to abdicate to the Strasbourg Court.

If we shift from the difficult to the unexplored, ethics (or more narrowly bioethics) seems to be the stand-out omission in the search results. We did not anticipate this gap: quite the opposite—the legacy of Nuremberg, the negotiation of the Oviedo Convention and, more generally, the rise of ‘public bioethics’, meant that we had been expecting material that would allow us to identify the Court’s position on the relationship between bioethics and human rights. We had come across, but discounted, the advice given by representatives of the Court (in the context of Recommendation Rec(2003)10 of the Committee of Ministers concerning xenotransplantation) to the effect that the ECHR ‘should be understood as a legal instrument aimed at securing individual rights and as such it may be of limited relevance to policy issues in the field of bioethics’.²³⁸ If this is the ‘official’ stance, we would ask why and also for how long can it survive?

Still, the search threw up positives too—most obviously, the cluster of ‘environmental’ obligations stemming from *Taşkın et al.* The text of the ECHR doesn’t exactly prompt one to think in terms of environmental rights, so it was genuinely interesting to see the Court’s crafting of positive obligations from Articles 2 and 8.²³⁹ The platform the Court has created for the principle of public participation is particularly welcome—in part because of its ongoing reluctance to use Article 10 as the basis for a general right of access to information. On the precautionary principle, we did not find enough to say how it is likely to fare at Strasbourg; what we can say, however, is that the

²³⁷ Ibid. at paras 42-43. See Mantavoulou, ‘*N v UK: No Duty to Rescue the Nearby Needy?*’ (2009) 72 *Modern Law Review* 815.

²³⁸ Explanatory Memorandum to Recommendation Rec(2003)10 of the Committee of Ministers to Member States on Xenotransplantation, Appendix.

²³⁹ See, in particular, the cases cited supra n. 157.

principle is now on the Court's radar. There is, moreover, a related point concerning lack of scientific consensus as a trigger for the margin of appreciation. We saw a controversial use of this trigger in *Fretté v France*,²⁴⁰ but we saw too that a different approach was taken in *EB v France*²⁴¹ and, drawing on *Goodwin (Christine) v United Kingdom*,²⁴² wherein the Court stepped away from another standard trigger and indicated a willingness to act in the absence of a 'common European approach' to the issue at hand, we might speculate that something similar could happen in this context too. That move is, as they say, 'one to watch'. On balance, we would say that the same advice is apt as regards the Court's role as an actor in the field of new technologies and human rights. Put differently, this is a Court that is engaged in 'works in progress'.

²⁴⁰ Supra n. 82.

²⁴¹ Supra n. 84.

²⁴² Supra n. 231 at para. 85.